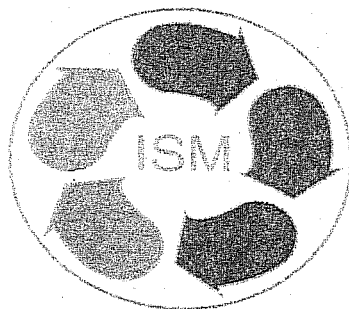


# **Lawrence Berkeley National Laboratory**

**<<Division>>**



## **2006 Integrated Functional Appraisal**

**<<Date>>**

IFA Team Members

&lt;&lt;Name&gt;&gt;

IFA Team Leader - EH&amp;S

*Signature**Date*

&lt;&lt;Name&gt;&gt;

<<Division>> – Division Safety  
Coordinator

&lt;&lt;Name&gt;&gt;

DOE Berkeley Site Office

&lt;&lt;Name&gt;&gt;

EH&amp;S Subject Matter Expert

&lt;&lt;Name&gt;&gt;

EH&amp;S Subject Matter Expert

&lt;&lt;Name&gt;&gt;

EH&amp;S Subject Matter Expert

&lt;&lt;Name&gt;&gt;

EH&amp;S Subject Matter Expert

&lt;&lt;Name&gt;&gt;

Electrical Safety

&lt;&lt;Name&gt;&gt;

RN – Health Services

## Executive Summary

*IFA Report Guidance: The Executive Summary should include a brief description of the appraisal; areas inspected, interviews conducted, and any special areas of emphasis. Include general statements of formal authorization compliance and technical safety. Summarize findings and noteworthy practices. Avoid subjective opinion statements.*

*Executive Summary*

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*IFA Report Guidance: If you want to add figures using automated caption/table format, call Ross Fisher at 6934 if you're not sure how to do this.*

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## 1 Introduction

**IFA Field Guidance:** The Integrated Functional Appraisal (IFA) is a key component of Lawrence Berkeley National Laboratory's (LBNL's) integrated safety management (ISM) system, and forms one of the three tiers of LBNL's Environment, Safety and Health (ES&H) self-assessment program. The Environment, Health and Safety (EH&S) Division conducts an IFA for each Laboratory division every three years.

**IFA Report Guidance:** Include the above statements, adding additional detail about the timeframe of the IFA and when the last one was conducted for the division being appraised if the interval since the last appraisal is not 3 years. Describe any unique information you deem appropriate.

### 1.1 Laboratory Management IFA Oversight

The EH&S Division and Office of Contract Assurance jointly oversee the implementation of the IFA. In response to changing Laboratory program audit needs, a steering committee was formed to assure that maximum audit effectiveness is achieved. The IFA Steering Committee members are listed in **Figure 1**.

Figure 1 2006 IFA Steering Committee

Member	LBNL Organization
Michelle Flynn	Office of Contract Assurance (OCA) – Chair
John Chernowski	OCA
Paul Blodgett	EH&S - Industrial Hygiene
Jack Salazar	EH&S – Liaison Coordinator
Richard DeBusk	EH&S - Occupational Safety
Ross Fisher	EH&S - IFA Coordinator

Some restructuring of the IFA process has been initiated whereby:

- The IFA team leader field guidance and IFA report template previously provided as separate documents have been combined into one document
- The IFA will include hazardous work<sup>1</sup> program compliance
- Line management authorized work and non-technical work are de-emphasized

<sup>1</sup> Work conducted under special hazardous work authorization or permits such as lock-out-tag-out, energized work, confined space work, surface penetration, fire safety, hoisting and rigging activities, ultra-centrifuge use, etc.

- Details of formal work authorizations and hazardous work permits will be audited
- IFA team leaders will gain Steering Committee approval of an appraisal plan before performing the IFA
- The IFA report will be reviewed by the Steering Committee prior to final acceptance by the IFA Coordinator
- Training will be provided for IFA leaders and their teams
- EH&S Liaisons will be allowed the opportunity to lead IFA teams for a division other than their assigned division

## 1.2 IFA Purpose

IFA Field Guidance: The purpose of the IFA is to conduct a technical environmental and occupational safety and health audit and physical inspection of a division's hazardous operations, and the controls and programs used to mitigate the identified hazards. The appraisal evaluates compliance with federal, state and local regulation, and with LBNL policy. The IFA team reports appraisal results and tenders corrective action and improvement recommendations to the division as appropriate. The IFA process also provides an Operational Awareness window for LBNL's Berkeley Site Office DOE program liaisons.

IFA Report Guidance: *General statements communicating the above guidance.*

## 1.3 Scope

IFA Field Guidance: The primary focus of the appraisal is directed toward work conducted under formal authorizations and hazardous work permits. If during the appraisal work is observed with a level of authorization not commensurate with the level of hazards involved, a finding shall be documented. Pay particular attention to areas and operations with previously noted deficiencies and to activities and programs that don't have a rigorous audit trail. These areas should be determined during the review of documentation – see 2.2.1.

IFA Report Guidance: *Provide an introductory statement regarding the division's formally authorized work, work conducted under hazardous work permit, and any areas of special emphasis (ORPS occurrences, etc.).*



## 2 Appraisal Process

### 2.1 Team

#### 2.1.1 Team selection

IFA Field Guidance: Select core IFA team members, matching personnel expertise with the nature of the issues and hazards to be evaluated in the division. Additional subject matter experts (SMEs) may be added as necessary during the process. Include an electrical safety subject matter expert on all appraisal teams.

IFA Report Guidance: Describe the basis for team member selection, including SMEs for each formal authorization. List the team members and area of expertise (if a table format is used for displaying this information, caption it as a figure).

#### 2.1.2 Team member roles and responsibilities

IFA Field Guidance: The IFA team leader is responsible for the following: compiling the IFA team; managing the retrieval of all pertinent documents; defining the scope of the IFA with the assistance of the division safety coordinator; coordinating meetings; communicating results to the appraised division; and preparing the IFA report. The IFA team member SMEs are responsible for reviewing applicable documents with respect to their field of expertise. All team members are responsible for reporting any ES&H concerns they identify, regardless of their field of expertise.

IFA Report Guidance: Document the expectations of the team leader and members and how the work was allocated among your team members.

#### 2.1.3 Team meetings

IFA Field Guidance: Conduct a preliminary informational meeting with the division's EH&S liaison and safety coordinator to review the process and information provided herein.

Conduct a planning session with the division safety coordinator and identified team members. Encourage division personnel to add concerns and issues they may have to the appraisal scope. The IFA planning session should include the following discussions:

- IFA scope – identification of the formal authorizations and hazardous work permits and the affiliated EH&S programs and work hazards to be audited

- Time frame for completing the process (the tentative completion date of 15 July 2006 will be discussed in the 2006 IFA commencement meeting)
- Division responsibilities and logistics (i.e., providing documentation and scheduling interviews and field audits with division personnel)

Invite DOE representatives to participate in appropriate meetings and inspections as part of LBNL/BSO Operational Awareness. The respective DOE BSO Program Leads are reflected in the current year IFA Resources sheet. This sheet is updated annually and available from the LBNL IFA coordinator.

After completing the IFA process and the report, conduct a closing conference with division line management and safety coordinator (include key team members and DOE representative) to summarize the IFA results and address outstanding issues.

*IFA Report Guidance: Include a summary of team meetings, key issues, etc. Include copies of meeting attendance rosters, and, if available, agendas and minutes in Appendix A. Complete the table of meeting information on the Appendix A cover page.*

## 2.2 Planning the Appraisal

### 2.2.1 Documentation and database reviews

IFA Field Guidance: Prior to the planning session, assemble and review the institutional program documents, policies and procedures, formal authorizations and hazardous work permits that will direct the IFA process.

#### General Information

- Division ISM Plan
- PUB 5344, LBNL EH&S Self-Assessment Program
- PUB 3000, Chapter 6, Safe Work Authorization
- PUB 3000, Chapter 21, Radiation Safety
- OHP Procedures, in particular, 705 (RWP Program) and 707 (RWA Program)
- LBNL Biosafety Program and Manual
- PUB 3093 Waste Accumulation Guidelines
- PUB 3000, Chapters pertaining to Hazardous Work Permits
- Facilities ADMN Procedure 053 – Permit to Penetrate Ground or Existing Surfaces of LBNL Property

#### Facility Permits / Authorizations

- Safety Analysis Documents (SADs) / Final Safety Analysis Documents (FSADs)

- Discharge permits (sewer, air, etc)
- NEPA/CEQA documents (Environmental Impact Reports, Environmental Assessments, or Categorical Exclusion Basis as may be appropriate)

#### Formal Work Authorizations

- Activity Hazard Documents (AHDs)
- Radiological Work Authorizations (RWAs)
- Radiological Work Permits (RWPps)
- General License Authorization (GLAs)
- Sealed Source Authorizations (SSAs)
- X-ray Authorizations (XAs)
- Biological Use Authorizations (BUAs)

#### Hazardous Work Authorizations and Permits

- Confined Space
- Energized Work Permits (A and B)
- Fire Safety
- Surface Penetration
- Lock Out/Tag Out
- Waste Management Group information on Waste Accumulation Areas (WAAs) and Satellite Accumulation Areas (SAAs)
- Any other hazard assessment documentation

The IFA leader will complete the IFA Documentation Reference Sheet in Appendix B.

IFA Report Guidance: Briefly describe the document review process. Include a completed copy of the IFA Documentation Reference Sheet in Appendix B.

#### 2.2.2 Identification of operations

IFA Field Guidance: Review and understand the hazards for the appraised division. The IFA scope must include the areas where work is conducted under Formal Work Authorization and Hazardous Work Permits. Include other high hazard operations not specifically addressed in PUB 3000, Chapter 6 such as work requiring special authorization such as ultracentrifuge use, crane and hoist use, fork truck or other heavy equipment operation. Identify key personnel – PI's, work leaders, and authorized users.

IFA Report Guidance: Describe the review process. List the operations and areas included in the IFA under the following categories:

- Formal Work Authorizations
  - Facility Authorizations
  - LBNL Formal Work Authorizations

- *Hazardous Work Authorizations*

*All formally authorized work must be included in the IFA scope.*

*Appendix C can be used to summarize the information about operations and areas appraised to supplement the IFA report discussion.*

### 2.2.3 IFA plan review

IFA Field Guidance: Once the IFA team is assembled, documentation is reviewed, and operations and areas are identified, the IFA leader will conduct a pre-appraisal meeting with the IFA Steering Committee.

IFA Report Guidance: *Include statement that the proposed IFA team and planned operations and areas for review received concurrence from the IFA Steering Committee. Discuss issues resolved during this concurrence process.*

### 2.2.4 Scheduling interviews and field audits

IFA Field Guidance: The IFA leader will work with the Safety Coordinator, Pls and staff to coordinate an effective field audit program.

IFA Report Guidance: *Document any unique issues associated with this process such as operations shutdowns, escorting requirements, etc. If there are no issues to discuss, delete this section.*

## 2.3 Field Audit

IFA Field Guidance: During the field audit, team members should compare their observations to formal work authorizations, using the authorization documents themselves, and other tools such as the IFA Field Inspection Guide checklist found in Appendix D. Depending on the outcome of the IFA team's documentation review and other preparatory efforts, additional field inspection forms and checklists may be generated.

Appendix E provides a format that has been used successfully for assisting in the field documentation of field observations and findings. It is a required format for the final report (see 3.2.2 and 3.2.2 below).

IFA Report Guidance: *Provide general discussion of how field audits were conducted and documented. Describe participation by division personnel. If additional field inspection forms and checklists are used, they should be incorporated into the report as figures or appendices. Enter the interview dates, topics and personnel involved in the second half of the table, IFA Team Meetings, Inspections and Interviews, in Appendix A.*

## 2.4 Interviews

IFA Field Guidance: The interview element will constitute a significant part of the IFA process. The purpose is to ensure the division is following its process for assuring work is properly authorized, as described in its ISM plan. During the interviews, determine if staff understand the authorization requirements and corresponding hazards. Based on initial interviews, determine if additional documentation review and/or interviews are warranted.

This phase of the IFA includes a review of training programs and documentation (including on-the-job training [OJT]) and preparation of applicable field inspection and interview checklists and guide sheets. Some examples of topics that guide the interviews are:

- Validation of current crane and hoist user training and current implementation details such as crane and hoist logs, lock out, etc. Status of crane and rigging components certification
- Validation of Lock Out Tag Out (LOTO) training and determination of proper LOTO implementation
- Validation of Formal Work Authorization-required training and OJT as well as implementation of specially required controls
- Validation of fork truck training and program implementation
- Validation of ultra-centrifuge use training, authorization and maintenance program

IFA Report Guidance: Provide a list of those interviewed, job title, etc. If applicable, describe how the interviews prompted further interviews and/or focused the IFA. If an audit format with checklist or interview question prompts was used, include the form as an additional appendix, or figure. If of value in assessing compliance status, tabulate the data accumulated on such forms and either incorporate in the report body or as an appendix. In either case, integrate the results into your report discussion and findings.

## 2.5 Photographs

IFA Field Guidance: Take photographs during the appraisal field inspections as backup documentation for the tangible findings.

IFA Report Guidance: Label each photograph file and place in the current IFA division folder on the EH&S G drive ([pathway link here](#)). Name each photo file that either starts with or incorporates the item number from the line in Appendix E that it represents. Including a building and room (or other location description) helps the corrective actions process. Catalog the photos for the report by placing thumbnail images in Appendix F.

### 3 Reporting Results

IFA Field Guidance: The IFA team leader determines the method and frequency of reporting by team members. Once all data are compiled, the team leader prepares and submits a fully formatted and edited draft report to the IFA Steering Committee (this is typically done after or during a review for factual accuracy by the appraised division and the IFA team). Audit sheets completed in the field may be incorporated as hard copies in the appropriate appendix. The IFA Steering Committee reviews the draft report and provides comments to the team leader. Once all comments are resolved and the report is finalized, the IFA coordinator submits the report to the EH&S Division Director for signature and transmittal to the appraised division's director.

IFA Report Guidance: IFA results may be documented as text in this section, a table in the body of the text, or as appendices.

#### 3.1 Formal Authorization and Hazardous Work Permit Discussion

IFA Field Guidance: Use a systematic approach to validate and document policy and programmatic compliance of each authorization and permit appraised. Appendix D, IFA Field Inspection Guide, provides one method of accomplishing this.

*Results must include a list of each formal authorization and hazardous work permit appraised, a corresponding statement of compliance status for each, and details of any areas of non-compliance. The format provided in Appendix D along with some referencing discussion in this section may be used to document each authorization or permit appraisal, or alternatively narrative format may be used. If narrative format is used, each authorization or permit must be addressed individually as to compliance status validation, affiliated program deficiencies, and affiliated EH&S compliance.*

#### 3.2 Categorization

IFA Report Guidance: Discuss each of these categories to provide details and basis of the practices, observations, and findings identified – especially if trends are suspected. Link to the documentation reviewed and the interviews conducted as appropriate (e.g., formal work authorization activities in general fully compliant, but line management authorized work spaces were associated with the bulk of the findings, etc.). Summaries of categories may be sufficient with detail provided in the appendices.

### 3.2.1 Noteworthy practices

IFA Field Guidance: Practices and conditions that are recognized for their excellence and should be considered for lab-wide application.

IFA Report Guidance: Describe in detail the practices or conditions the IFA team found noteworthy. Identify the basis or initiative that led to the practices and provide some extrapolation as to lab-wide applicability. You can use and refer to Figure 2 to itemize Noteworthy Practices in the discussion text.

Figure 2 Noteworthy Practices Observed During the 2006 IFA

Item	Practice Observed	Basis	Lab-wide Applicability
1			
2			
3			

### 3.2.2 Findings

IFA Field Guidance: Clear cases of practices or conditions that do not comply with regulations or LBNL policy. Findings are deficiencies and must be corrected.

### 3.2.3 Observations

IFA Field Guidance: Observations indicate opportunities for improvement. They may be practices and conditions that are not necessarily out of compliance as observed, but could lead to non-compliance under other circumstances from those observed, or if left unaddressed. Observations also reflect practices that, with some additional level of effort, could achieve noteworthy practices status.

IFA Report Guidance: List findings first and then observations in Appendix E. Discuss frequencies of specific findings, trends, anomalies, or other observations about the findings and observations.

## 3.3 Recommendations

IFA Field Guidance: As appropriate, and in collaboration with division representation, develop recommendations in response to the above observations and findings.

IFA Report Guidance: Cite specific LBNL policy or programmatic requirement, OSHA, building code, authorization or permit requirement, or other regulation in Appendix E for findings, or for observations that relate to potential out-of-compliance issues. Discuss observations in the context of underlying root causes and discuss the recommended corrective action or the level of effort that provides closure to the observation.

#### 4 Corrective Action Tracking and Follow-up

IFA Field Guidance: Deficiencies noted during an IFA require corrective action and shall be entered into the Corrective Actions Tracking System (CATS). Deficiencies that are discovered but corrected on the spot need not be entered into CATS, but must be recorded in the IFA results. Questions regarding this should be directed to the Office of Contract Assurance.

An important component of corrective actions and follow-up is determination of programmatic and system improvements. Analyze the appraisal findings and observations to determine what actions can be taken at institution, division, and work group levels that will improve the basic process of work planning and identification of hazards, control and mitigation of hazards, and safe conduct of work.

IFA Report Guidance: Document that deficiencies noted during the IFA require corrective action and emphasize that entry into CATS is **required** for all deficiencies not immediately resolved.

Provide a discussion of improvements that can be made at the institution, division, and work group level to strengthen safe performance of work at LBNL.

#### 5 Conclusion

IFA Report Guidance: Provide concluding remarks, general and specific as appropriate, to convey the environmental, occupational safety, and health status of the division's operations conducted under formal authorization and hazardous work permit. **Avoid subjective generalities.** The IFA is a technical assessment and audit and should reflect technical and specific conclusions.



# Appendices

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Appendix A IFA Team Meetings, Inspections and Interviews

Appendix B IFA Documentation Reference Sheet

Appendix C Operations and Areas Inspected

Appendix D IFA Field Inspection Guide

Appendix E Findings and Observations

Appendix F Photographs

## Appendix A IFA Team Meetings, Inspections and Interviews

Meeting Date	Topic	Attendees

Appendix A – Team Meetings, Inspections and Interviews		
Inspection / Interview Date	Location	Participants

## Appendix B IFA Documentation Reference Sheet

DOCUMENT TYPE/TITLE	Reference (Doc #, dates, etc.)
<b>Facility Permits / Authorizations</b>	<i>See below for example use of format. Table and appendix are designed to expand to number of pages necessary to accommodate all listings</i>
Safety Analysis Documents (SADs)	
Final Safety Analysis Documents (FSADs)	
Discharge permits (sewer, storm water, air)	
NEPA/CEQA documents	
<b>Formal Work Authorizations</b>	
Activity Hazard Documents (AHDs)	AHD 1
	AHD 2
	Etc.
Radiological Work Authorizations (RWAs)	RWA 1
	RWA 2
	Etc.
Radiological Work Permits (RWPs)	
General License Authorizations (GLAs)	
Sealed Source Authorizations (SSAs)	
X-ray Authorizations (XAs)	
Human Subjects	
Biological Use Authorizations/Registration	
Waste Management Group information on Satellite Accumulation Areas (SAAs) and Waste Accumulation Areas (WAAs)	
Other	
<b>Hazardous Work Authorization / Permits</b>	
Confined Space Permit	
Energized Work Permit (A and B)	
Fire Safety Permit	
Lock Out Tag Out	
Surface Penetration Permit	
Ultracentrifuge Use	

IFA Team Leader Signature

Date

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## Appendix C Operations and Areas Inspected

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## **Appendix D IFA Field Inspection Guide**

*See Excel worksheet file: 2006 IFA Report Appendix D - Field Inspection Guide*

IFA Report Guidance: Use and submit in Excel format. The document will be embedded in the final portable document format report.



## **Appendix E Findings and Observations**

*See Excel worksheet file: 2006 IFA Report Appendix E – Findings and Observations*

*IFA Report Guidance: Use and submit in Excel format. The document will be embedded in the final portable document format report.*

## Appendix F Photographs

IFA Report Guidance: Apply 'thumbnail' images of the appraisal photos (where available) in the order of the numbered findings and observations from Appendix E.

Findings and Observation Photos			
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

Findings and Observation Photos			
17	18	19	20
21	22	23	24

## MESH Review – Guidance and Overview

The MESH Review Team normally consists of three SRC members and one support person from the Office of Contract Assurance (OCA).

The review usually takes about two days, spread over several months. The process is described formally on the SRC website (<http://www.lbl.gov/ehs/src/mesh.shtml>). The following meetings or events are typical:

- Team planning meeting(s) (1-2 hours). The team will have access to many documents provided by the division and OCA (the Division completes the SRC MESH Questionnaire before this meeting). The team introduces themselves, reviews the documents, and plans the review. A second meeting may be necessary to finalize the review plan. The MESH team can request additional information from the Division if the SRC Questionnaire material is not sufficient.
- Division Introduction (0.5 – 1 hour). The Division presents introductory material related to their operation and EH&S activities.
- Interviews (3-5 hours). The team interviews a range of Division staff, either individually or in groups. Interviews should include the Division Director/Deputy, Department Heads, PI's, line staff, and new staff and/or students.
- Field Activity (1–3 hours). The team visits high hazard locations, locations with a large number of staff, and/or a cross-section of Division space of their choosing. Informal interviews with all staff should be a major component of this activity.
- OCA prepares a draft of the report. The team can meet to discuss the findings either before or after the draft (1-2 hours).

### Sample interview areas or questions:

- How does the Division communicate EH&S issues at the group/team level?
- How does the Division respond to problems and incidents? Are they proactive in any areas?
- How has the division responded to findings from previous assessments?
- Who sets EH&S expectations? Is staff aware of the expectations? How are they enforced?
- How does the Division manage new employees, faculty, students, matrixed staff, and/or subcontractors?
- What is the Division policy on ergonomics?
- Is the work authorization process effective?
- What Best Practices should be copied by other Divisions?
- How does the Division track work changes and review their EH&S impacts?
- Does everyone hear the same message about EH&S?
- How many employees report to each PI or supervisor?
- Do staff know who to contact if they have a safety problem?

### OCA roles:

- Aid in MESH document collection and preparation; provide other review documents
- Coordinate field activities

- Provide input on lines of inquiry
- Draft initial MESH report

DOE/ Berkeley Site Office Observation:

- BSO may observe the MESH team meeting in preparation for reviews. This provides DOE the opportunity to observe discussions regarding the MESH team's lines of inquiry, proposed staff interviews, and proposed inspection locations.
- Following the MESH review, BSO may observe the divisional out-briefing (if conducted) and review a draft version of the final report.
- The MESH team and subject division will address BSO questions and concerns resulting from the review of the draft final report.
- BSO will not observe formal review activities
- If subject division approves, BSO may observe division response and presentation to the Safety Review Committee meeting



# Safety Review Committee

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## SRC MESH Reviews

**Objective of the MESH Review:** To evaluate the Division's management of environment, safety, and health in its operations and/or research, focusing on the implementation and effectiveness of the Division's Integrated Safety Management (ISM) Plan.

### Type of Review:

1. A peer review that provides a strong perspective from the research and operations community on the state of ES&H in the assessed division.
2. A self-assessment that is distinctly different from the Division self-assessments and EH&S Integrated Functional Appraisals (IFA).

### Scope of the MESH Review:

#### 1. Pre-MESH Documentation

- A. The assessed Division completes the SRC MESH Questionnaire prior to the review. The questionnaire is a self-assessment of the state of ES&H at the Division. A short list of Division documents is also requested.
- B. The Office of Contract Assurance (OCA) provides the MESH Team with the assessed Division's most recent division self-assessment, MESH, and IFA reports, and corresponding validation reports.

#### 2. MESH Team Analysis and Planning

- A. The MESH Team reviews the completed MESH questionnaire and the Division's most recent self-assessment, IFA and MESH to develop the line of inquiry for the MESH review. The MESH Team's planning focuses on the following:
  1. verifying information compiled in the questionnaire and profile
  2. identifying key issues from the questionnaire and profile
  3. evaluating for ISM implementation and effectiveness
- B. OCA provides staff support throughout the MESH review, including: document collection and preparation, coordination of field activities, input on lines of inquiry, and drafting the initial MESH report.

#### 3. MESH Review

- A. The MESH Team Leader coordinates with the Division to schedule the MESH review.
- B. The Team conducts an opening meeting with the Division for the presentation of the Division ES&H program. The MESH line of inquiry is initiated at this meeting.
- C. The MESH team conducts a field visit of pre-selected Division facilities.
- D. Interviews of Division personnel constitute the majority of the MESH Team's efforts. They are conducted throughout the review and encompass as many job levels within the Division as feasible. Some interviews are scheduled while others are conducted randomly during the field visit. The Division Director should be scheduled for an interview if he/she is not present at the opening meeting.
- E. The Team conducts a closing meeting to summarize the preliminary findings of the review.
- F. DOE/ Berkeley Site Office may observe the MESH team meeting in preparation for reviews, and the Divisional out-briefing (if conducted). BSO may also review a draft version of the final MESH report. BSO will not observe formal review activities or SRC meeting discussions unless the Division being reviewed approves their participation.

#### 4. MESH Report

- A. The MESH Team prepares a report of its review. The report includes a brief summary of the Division organization and operation, summary of the review process, and results of the review. The results are categorized as follows:

Noteworthy practices – practices conditions that are recognized for their excellence and should be considered for lab-wide application.

Observations – observations indicate room for improvement. They may be practices and conditions that are not necessarily out of compliance as observed, but could lead to non-compliance if left unaddressed. Observations also reflect practices that, with some additional level of effort, could achieve noteworthy practice status.

Concerns – clear cases of practices or conditions that do not comply with regulations or LBNL policy, and/or indicate inadequate ES&H management systems within the Division. Concerns are deficiencies and must be corrected.

Workspace safety deficiencies identified during tours are documented and submitted to the Division Safety Coordinator for input into the Corrective Action Tracking System (CATS). If there are sufficient safety findings to indicate an unsatisfactory trend, those findings are summarized and documented in the MESH Report.

- B. The MESH Team submits a draft report to the Division. The Division conducts a factual accuracy review of the report and communicates any concerns back to the MESH Team.
- C. The Team submits the final report, with signature sign-off by each team member, to the SRC Chair, the assessed Division Director, and the Division Safety Coordinator.

#### 5. MESH Review Follow-up Activities

- A. The Division performs these follow-up activities:
1. Enters and tracks findings in CATS.
  2. Presents its ES&H program and proposed corrective actions for all concerns and, as appropriate, observations from the completed MESH Report at the next available SRC meeting.
- B. The SRC performs these follow-up activities:
1. MESH Team presents a summary of its MESH Report to the SRC. This may be done at the same meeting, and just prior to, the Division's presentation to the SRC.
  2. MESH Team Leaders recommend the MESH review cycle for each Division.
  3. SRC provides the ISM Board with its recommended MESH review cycle.

#### 6. ISM Board Presentation

- A. Following the assessed Division Director's or Department Head's MESH presentation to the SRC, the SRC's EH&S Division representative will schedule a follow-up meeting with the ISM Board which consists of the Lab's Deputy Director, Chief Operating Officer, and the EH&S Division Director.
- B. The assessed Division Director or Department Head attends this meeting of the ISM Board in order to:
1. Discuss and refresh the division's or department's ISM plan.
  2. Communicate and discuss changes to the Plan since it was originally presented to the ISM Board. Some changes may include responses to the most recent MESH Review. This discussion will then serve as a revalidation of the ISM Plan by the Board.
  3. Discuss the recommended MESH review cycle as agreed upon by the SRC.